Malawi Government Ministry of Health



Standards and Guidelines for Comprehensive abortion Care

2020



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Foreword

Malawi's maternal mortality is among the highest in the region. However, Malawi Government has made significant strides to address this challenge over the last decade. In 2009, the Government adopted the first National Sexual and Reproductive Health and Rights (SRHR) Policy which was revised in 2017. The goal of this Policy is to provide a framework for the provision of comprehensive SRHR to all women, men, and young people through informed choices enabling them to attain their reproductive rights and health goals safely and freely in line with the Constitution of Malawi as well as the Public Health Act. For instance, Section.3.1.2.11 of the National SRHR Policy (2017-2022) states that abortion shall be provided to the full extent of the existing national law and guidelines shall be formulated to properly interpret the law. Furthermore, Section 3.2.2.9 provides for post abortion care (PAC) services.

In 2013, the Government of Malawi adopted the Gender Equality Act ensuring the equal protection and status of women and girls in the state. In line with the Constitution, the Public Health Act as well as the SRHR Policy, Section 19 of Gender Equality Act specifically provides for the right to SRHR of all persons in Malawi. Since the enactment of this law, Government has continued taking steps to ensure realization of sexual and reproductive health rights of all people in the country.

According to Section 243 of the Penal Code, pregnancy can only be legally terminated by a qualified health personnel to save the woman's life. However, women and girls are terminating their unplanned pregnancies in clandestine settings which is contributing to 18% of maternal mortality, high morbidity from unsafe abortions and its related complications.

To ensure the health workforce is ready to meet the identified challenges, it is necessary to align national service delivery guidelines with the latest evidence and clinical standards. The goal of these guidelines is to facilitate the provision of safe and essential health services that are necessary to treat a pregnant woman or girl in saving her life as well as women and girls in post abortion situations. This document is directed to health providers and service delivery managers in guiding how, by whom, and in which facilities may these services be provided to save a woman's life as well as provision of post abortion care within the frameworks of the SRHR Policy as well as laws of Malawi.

It is the hope of Malawi Government that these guidelines will serve as the basis for ongoing training and support to the health workforce, to ensure sustainable access and availability of comprehensive sexual and reproductive health care for all women and girls.

The Ministry of Health remain committed to protecting the health and well-being of all people in this country. This guidance offers clinical and medical authority necessary for preventing maternal deaths by providing essential and life-saving health care to women and girls when and where they need it.

Dr Charles Mwansambo, Secretary for Health

Executive Summary

Malawi has low modern contraceptive prevalence rate as well as high unmet need for family planning methods. This places women at high risk of conceiving unintended pregnancies. Many women with unintended pregnancies resort to unsafe abortions. Thirty-eight (38) of every-one thousand (1,000) women have induced abortions each year in Malawi. Most of these abortions result in complications for post abortion care in the health system as well as one of the contributing factors to Malawi's high maternal mortality.

The Malawi Government is committed to providing comprehensive and integrated sexual and reproductive health (SRH) services in accordance to national and international recommendations. These guidelines have been developed in line with the National Sexual and Reproductive Health and Rights Policy (2017-2022) Section 3.1.2.11 on induced abortion in saving the pregnant woman's life as well as Section 3.2.2.9 on PAC in line with the current law. Through a consultative review process, a task force committee was constituted by Ministry of Health (MOH) Reproductive Health Directorate (RHD). The Safe Motherhood Subcommittee guided the process for this task force, which included MOH service providers and PAC coordinators, members of Association of Obstetricians and Gynecologists of Malawi (AOGM), representatives of health institutions of higher learning, health regulatory bodies, health professional bodies, non-governmental organizations, representatives of the Safe Motherhood Subcommittee, Ministry of justice as well as Malawi Law Society.

The guidelines are divided into six sections: Introduction and Chapters 1, 2, 3, 4 and 5.

The introduction outlines the current trends in abortion and its consequences, at the worldwide level and in Malawi. It also discusses key SRH indicators related to maternal health and PAC services. Chapter 1 presents the current legal framework, internationally and in the local context. It explains Malawi laws and policies that inform abortion and PAC services. It also includes guidance on when it is medically acceptable to provide induced abortion services within the current legal framework. Chapter 2 discusses the surgical methods of provision of comprehensive abortion care services including PAC. In chapter 3 the medical methods for conducting abortion and post abortion care are discussed. Chapter 4 presents the family planning for post abortion care and abortion services. Chapter 5 depicts task sharing in Malawi for the provision of these services to increase access and quality of post abortion care services in Malawi. The appendix provides job aides that would support service providers in the provision of quality comprehensive abortion care services.

Taskforce members

The Ministry of Health would like to thank the following taskforce members for leading the review of the guidelines.

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Validation Workshop Participants and Safe Motherhood Subcommittee Members

The Ministry of Health would like to thank the following members who participated in validation of the guidelines.

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Definition of terms

Abortion is defined as the spontaneous or induced termination of pregnancy before foetal viability (28 weeks gestation is widely used in low-resource settings including Malawi) calculated from date of onset of last menses. Abortion safety is classified into safe, less safe and least safe.

Safe abortion is the termination of a pregnancy by people having the necessary skills, in an environment meeting minimal medical standards.

Less safe abortion is the termination of pregnancy by a trained provider using an unsafe method, or using a safe method without appropriate information or support from a trained person.

Least safe abortion is the termination of a pregnancy carried out by people lacking the necessary skills, or in an environment lacking minimal medical standards, or both.

Postabortion care (PAC) consists of emergency treatment for complications related to spontaneous or induced abortions and removal of retained products of conception. Comprehensive PAC includes the integration of other sexual reproductive health services, including rights-based contraceptive counselling and services for safe birth spacing and the prevention of future unintended pregnancies.

Comprehensive abortion care (CAC) includes all the elements of PAC as well as safe induced abortion for all legal indications (i.e., as allowed by national law) in addition to postabortion contraception services and referrals for other sexual and reproductive health services. These elements all contribute to reductions in maternal morbidity and mortality related to unsafe abortion.

Therapeutic abortion is the termination of pregnancy performed when the pregnancy endangers the mother's health or when the foetus has a condition incompatible with normal life.

Septic abortion is abortion complicated by infection. Sepsis may result from infection if organisms rise from the lower genital tract following either spontaneous or unsafe abortion. Sepsis is more likely to occur if there are retained products of conception and evacuation has been delayed. Sepsis is a frequent complication of unsafe abortion involving instrumentation and poor infection prevention practices.

Surgical abortion is an abortion procedure using surgical methods. World Health Organization-approved surgical methods include manual vacuum aspiration or electric vacuum aspiration. Dilatation and curettage are obsolete surgical method for abortion care, to be conducted only above 14 weeks gestation age.

Medical abortion is an abortion procedure using medicines, specifically misoprostol alone or the combination of mifepristone and misoprostol.

Missed abortion is a condition in which the foetus did not form or has died, but the placenta and embryonic tissues are still in the uterus. It's known more commonly as a missed miscarriage. It's also sometimes called a silent miscarriage.

Primary prevention is concerned with preventing the onset of disease; it aims to reduce the incidence of disease. In the context of abortion and postabortion care, primary prevention entails prevention of unintended pregnancies.

Secondary prevention attempts to intervene and end a disease or condition before it fully develops, aiming to reduce the impact of a disease or injury that has already occurred. Provision of safe abortion services is secondary prevention.

Tertiary prevention consists of the prevention of disease progression and attendant suffering after it is clinically obvious and a diagnosis established. Provision of postabortion care services is tertiary prevention.

Acronyms and Abbreviations

AU African Union

AOGM Association of Obstetricians and Gynecologists of Malawi

BP Blood Pressure

CAC Comprehensive abortion care

D & C Dilatation and curettage

FBC Full blood count

HLD High level disinfection

ICPD International Conference on Population and Development

IP Infection Prevention

IUD Intra uterine contraceptive device

LMP Last menstrual period

MVA Manual vacuum aspiration

MCPR Modern contraceptive prevalence rate

MOH Ministry of Health

MA Medical abortion

NSAID Non-steroidal anti-inflammatory drug

PAC Post abortion care

POC Products of conception

RPOC Retained Products of Conception

RHD Reproductive Health Directorate

SRH Sexual and reproductive health

SRHR Sexual and Reproductive Health and Rights

WHO World Health Organization

WRAG Women of the reproductive age group

Introduction

World trends in abortion and postabortion care

The World Health Organization (WHO) reports that almost 56 million abortions occur annually worldwide, of which 54.9% are safe, 30.7% are less safe and 14.4% are least safe. Ninety-seven % (97%) of unsafe abortions occur in developing countries. Therefore, the proportion of unsafe abortions is significantly higher in developing countries compared to developed countries. In Africa, almost 76% of the abortions are unsafe. The more restrictive the environment, the higher the proportion of unsafe abortion and its consequences.

Key sexual and reproductive health indicators in Malawi

In Malawi, the modern contraceptive prevalence rate (mCPR) is 58% among currently married women ages 15-49, but only 43% among sexually active unmarried women of the reproductive age group (WRAG).² While 19% of currently married women have an unmet need for family planning, the unmet need is higher (39.8%) among sexually active unmarried WRAG. Low mCPR and high unmet need for family planning places women at risk of conceiving unintended pregnancies. Fifty-three% (53%) of pregnancies are unintended at the time of conception and 29% of girls aged 15 to 19 have already begun childbearing.^{2,3,4} Many women with unintended pregnancies resort to unsafe abortions. In Malawi in 2015, 30% of pregnancies ended in unplanned births, 16% in abortion and 15% in miscarriages. Thirty-eight (38) of every 1,000 women have induced abortions each year.³ Most of these abortions result in complications that are costly to the health system and dangerous to the women and may culminate in death.

The maternal mortality ratio of 439 per 100,000 live births is one of the highest in the world and abortions cause 17% of maternal deaths.² Providing effective modern contraceptive methods to couples, women and sexually active youth will reduce the number of unintended pregnancies. Furthermore, improving the availability and accessibility of comprehensive abortion services within the context of the law will help to decrease the rate of unsafe abortions, complications and maternal deaths. Most women seeking to terminate a pregnancy will do so regardless of the legal status in their country.⁵ Denying women services may force women to induce abortions unsafely, risking their lives in the process.

Malawi's commitment to provide quality and comprehensive integrated sexual and reproductive health services

The Malawi Government is committed to providing comprehensive and integrated sexual and reproductive health (SRH) services in line with national and international recommendations. Since 1994, the Malawi Government has made such commitments at the International Conference on Population and Development (ICPD).⁶ During the 2019 ICPD conference held in New York city, Malawi re-committed to the Program of Action of the International Conference on Population and Development developed in 1994.⁷ The ICPD recommendations include implementing provision of accessible, comprehensive quality abortion and post abortion care services.^{6,7}

These comprehensive abortion care guidelines for providers are a critical element of the Malawi government's commitment to ensure that comprehensive integrated sexual and reproductive health (SRH) services are provided to its citizens. The guidelines have been developed in line with the Sexual Reproductive Health and Rights Policy (2017-2022) Section 3.1.2.11 call to formulate guidelines that interpret the current law.⁸ This helps in addressing knowledge gaps among health service providers on the current legal framework.

The WHO says that "Policy and regulatory barriers, stigma or the unwillingness of some health-care professionals to provide care may further limit the availability of safe abortion and postabortion care providers". It is the hope of the ministry that the guidelines will contribute to reducing these challenges.

The process of developing the guidelines for providers

These guidelines were developed through a consultative process. A task force committee was constituted by Ministry of Health (MOH) Reproductive Health Directorate (RHD). The Safe Motherhood Subcommittee guided the process of forming the taskforce and supervised its work. The taskforce membership included MOH service providers and PAC coordinators, obstetricians and gynecologists, representatives of health institutions of higher learning, health regulatory bodies, health professional bodies, non-governmental organizations, representatives of the Safe Motherhood Subcommittee and legal organisations. The draft guidelines were developed and presented at a validation meeting led by the Safe Motherhood Subcommittee and changes made where required. Then the guidelines were presented to the senior management at MOH.

Outline of the comprehensive abortion care guidelines

The guidelines are divided into six sections: an introduction and Chapters 1, 2,3, 4 and 5.

The introduction outlines the current trends in abortion and its consequences, at the worldwide level and in Malawi. It also discusses key SRH indicators related to maternal health.

Chapter 1 discusses the current legal framework, internationally and in the local context. It explains Malawi laws, policies and acts that inform abortion and PAC services. It also includes guidance on when it is medically acceptable to provide abortion services within the current legal framework. The chapter does not cover all possible medical conditions. When faced with other medical conditions not mentioned herein, the provider should act in the best interest of the client.

Chapter 2 discusses surgical methods for provision of abortion and postabortion care services.

Chapter 3 discusses the medical methods for conducting abortion and postabortion care services.

Chapter 4 discusses family planning for post abortion care and abortion services.

Chapter 5 presents task sharing to increase access and quality of post abortion care services.

Chapter 1. Current abortion laws in Malawi

1.0. Introduction

The World Health Organization (WHO) defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". WHO further defines sexual health as "a state of complete physical, mental and social well-being in relation to sexuality." 10

WHO^{11(page 17)} recognises that "in almost all countries, the law permits abortion to save the woman's life, and in most of the countries abortion is allowed to preserve the physical and/or mental health of the woman. Therefore, safe abortion services, as provided by law, need to be available". Generally, danger does not mean only imminent threat to the concerned woman's life but includes potential risk to a woman's life.

Most African Union (AU) member states allow abortion at least to save a woman's life, consistent with the human right to life and WHO guidelines, which require protection by law, including when pregnancy is life-threatening or a pregnant woman's life is otherwise endangered. ^{12,11}

The AU provides guidance to member states on steps needed to ensure access to safe abortion, including when abortion is necessary to save the life of a pregnant woman. When governments commit to ensuring that access to safe abortions is available, incidence of unsafe abortion is reduced, as are maternal deaths from unsafe abortion. The AU requires member states to enact an enabling regulatory and policy environment, including development and dissemination of strategies and guidelines and training of providers, to ensure that every woman who is legally eligible has ready access to good quality abortion services. Therefore, AU member states must implement all legal indications for abortion to ensure improved access to safe abortion.¹²

AU member states should not implement the life exception in a limited way to mean imminent death. AU member states should not provide detailed lists of what they consider life-threatening medical conditions, as these lists may be interpreted too restrictively or be considered exhaustive, when in fact they are meant to be illustrative of situations that can be life-threatening, but they do not preclude clinical judgment of what is life-threatening for a particular woman. A provider may determine that it is necessary to provide safe abortion because, if they do not, the woman would risk her life by going to an unqualified practitioner. Where saving a woman's life is the only allowable reason for abortion, as in Malawi, it is essential for the Ministry to take steps to ensure there are trained providers for abortion services, that services are available and known, and that treatment for complications of unsafe abortion is widely available. It is also necessary to ensure that treatment for complications from unsafe abortion is provided in ways that preserve women's dignity and equality. Confidentiality, privacy and the right to choose by the woman should be respected.

The Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (Maputo Protocol) is a treaty instrument that is binding on all countries that ratify it. Forty-five (45) nations signed it and 28 ratified it, including Malawi. Article 14, "Health and Reproductive Rights," calls for removal of restriction to abortion. It specifically says: "States

Parties shall ensure that the right to health of women, including sexual and reproductive health is respected and promoted. This includes: a) the right to control their fertility; b) the right to decide whether to have children, the number of children and the spacing of children; c) the right to choose any method of contraception; f) the right to have family planning education."¹³

Under the Protocol, "States Parties shall take all appropriate measures to: a) provide adequate, affordable and accessible health services, including information, education and communication programs to women especially those in rural areas; c) protect the reproductive rights of women by authorizing abortion in cases of sexual assault, rape, incest, and where the continued pregnancy endangers the mental and physical health of the mother or the life of the mother or the fetus."¹³

1.1. Laws that impact abortion care in Malawi

The Constitution of Malawi and Sexual Reproductive Health

The Malawi Constitution¹⁴ provides for the right to life in Section 16. "Every person has the right to life and no person shall be arbitrarily deprived of his or her life". The Constitution also prohibits discrimination against women, including in the provision of health care (Section 20 "Discrimination of persons in any form is prohibited and all persons are, under any law, guaranteed equal and effective protection against discrimination on grounds of race, colour, sex,....") and affirms the need to protect women's rights (Section 24). Read together, these provisions require the protection of women's rights to life and health, including in the provision of comprehensive SRH care. The comprehensive SRH services include abortion care within the legal provisions and PAC.

In Section 24, the Constitution affirms the need to protect women's rights including sexual reproductive health and rights (SRHR) when read together with Sections 13(c) on provision of adequate health care, and Section 211 which incorporates international as well as customary international law into laws of the land.¹⁴

When read together, these provisions require the protection of women's right to life and health, including in the provision of comprehensive sexual and reproductive health care. The comprehensive SRH services include abortion care within the current legal frame work and post abortion care based on human rights and internationally accepted standards.

Furthermore, Section 11 (2)(2) of the Constitution directs the Courts of Malawi to include international law as well as comparable foreign case law where applicable for interpretation of laws of the land; this includes international human rights treaties where Malawi is a state party in relation to women's reproductive health.¹⁴ Thus, the constitution is consistent with the Maputo Protocol.

Acts and policies that impact abortion care in Malawi

Other acts which protect the rights of women include the Gender Equality Act and the Public Health Act. Sections 19 and 20 of the Gender Equality Act provide specifically for women's sexual and reproductive health and rights. Section 2 of the Gender Equality Act limits abortion within the context of the Penal Code. Thus, Malawian women have a right to choose. The Public Health Act provides for the right to health of all subjects of the state, without discrimination. When the description of the state is the public Health Act provides for the right to health of all subjects of the state, without discrimination.

Section 3.1.2.11 of Malawi's SRHR Policy (2017-2022) provides for abortion as permitted by law, including PAC. The section says, "Abortion shall only be provided to the full extent of the existing national law and guidelines shall be formulated to properly interpret the law."

The Malawi Penal Code¹⁷

Sections 149, 150 and 151. These sections prohibit any form of abortion including aiding and trading in materials for abortion with a maximum of 14 years imprisonment for the service provider, 7 years for the concerned woman and 3 years for the trader.

Section 243. A person is not criminally responsible for performing in good faith and with reasonable care and skill a surgical operation upon any person for his benefit, or upon an unborn child **for the preservation of the mother's life**, if the performance of the operation is reasonable, having regard to the patient's state at the time, and to all the circumstances of the case.

The current Penal Code permits abortion to preserve the life of the woman. Therefore, in Malawi, abortion is legal when provided within the context of the law. Despite that the Penal Code specifically mentions surgical operations for abortions to preserve the woman's life, modern medical advances have discovered better and higher quality medical drugs that are safely administered to save the life of the pregnant.

Using the golden rule in the law of interpretation of statutes, medical abortion also applies in preservation of the woman's life. Therefore, within the provided legal framework every woman has a right to PAC and abortion services when in need. The review of the PAC guidelines offers the opportunity to give clear guidance to providers while recognizing this Penal Code provision.

1.2. Guidance to medical practitioners on safe abortion care in Malawi

Safe termination of pregnancy may be required to preserve the life of the woman under the following circumstances, including but not limited to:

• Obstetric & Gynecological Conditions. Multiple Obstetric and Gynecological conditions can endanger the life of a pregnant woman. Multiple complications result from unsafe and clandestine abortions in Malawi; therefore, it is necessary to protect women from experiencing these life-threatening complications. ^{3,18,19,20,38} Conditions like hyperemesis gravidarum, eclampsia and multiple organ dysgenesis are dangerous

to the life of the woman when pregnancy continues. When faced with such obstetric and gynecologic conditions, it is legal to offer comprehensive abortion services.

- **Heart and Vascular Diseases.** Pregnant women may suffer from conditions not related to the pregnancy, but which worsen due to the pregnancy making treatment difficult. Some of these conditions are related to the heart. For instance, the Maternal mortality for women suffering from Eisenmenger Syndrome is very high, ranges from 30 to 65%. Dilated cardiomyopathy and hypertrophic cardiomyopathy with arrythmias, pulmonary hypertension, left ventricular ejection fraction less than 0.3 could place the life of women in danger during pregnancy risking death.
- **Kidney Diseases.** Conditions like worsening renal failure and severe connective tissue diseases like Systemic Lupus erythematosus (SLE)could cause severe kidney damage to pregnant women risking their lives.
- Cancers. Some cancers worsen during pregnancy and pose danger to the life of women. Advanced stages of cervical, ovarian, breast cancers and Leukemia could be complicated by the pregnancy. Comprehensive abortion services can improve the pregnant woman's survival and reduce systemic effects of treatment to the fetus since some treatments are harmful to fetuses but if delayed the woman could lose her life. Comprehensive abortion services may be required after careful consideration of the risks and benefits. ^{22,23,24,2540}
- **Blood Diseases.** Other complications of pregnancy may result in blood diseases (e.g. coagulopathy) that places the woman's life at risk.
- Other Conditions. There are many other health conditions that place a pregnant woman's life at risk. It is not possible to list all the conditions. Examples of these types of conditions could be tropical hepatosplenomegaly syndrome, HELLP syndrome, psychiatric disorders or severe depression with suicidal tendencies or other health conditions that are known to place the life of the woman in danger.

Note: This list is illustrative and does not preclude clinical judgement of what is life-threatening for a particular woman. Providers should respect the woman's choice.

The provider should reduce and avoid harm to the pregnant woman, maximize the benefits to her life, against the risks posed by continuing the pregnancy. If the provider is convinced that continuing pregnancy would endanger the life of the woman, he or she should provide comprehensive abortion care (if the woman chooses after medical advice).

Chapter 2. Protocol for Manual Vacuum Aspiration standards and guidelines.

Quality abortion and PAC services require comprehensive care, quick and evidenced-based emergency treatment, non-judgmental staff attitudes, respect for women's rights, psychosocial support and counselling, proper pain management, preventive services including family planning, and good linkages to other RH services.

When providing manual vacuum aspiration (MVA) services, provide privacy for conversations between women and providers, as well as for actual services. For example, procedure rooms should be partitioned for visual and auditory privacy, and only facility staff required for service provision should be present. There should be a private place for undressing, curtained windows, and cloth or paper drapes to cover the woman during the procedure. Male providers should have a female sentinel present.

Table 1 Advantages and disadvantages of using MVA (Adapted from IPPF guidelines)

Advantages	Disadvantages
Quicker	Perceived as invasive by some women.
More likely to have a complete abortion.	There is a minimal risk of cervical or uterine
	injury.
Emotionally convenient for some women.	There is a small risk of infection especially if
	infection prevention procedures are not
	followed.
Does not require complicated care,	Less privacy and autonomy for the client.
therefore takes place in a health center,	
clinic or hospital and can be done as an	
outpatient procedure.	
Can be used up to 14 weeks (at 12–14	
weeks needs extra skills and equipment).	
Client maybe eligible for all modern	
contraceptive methods, including	
sterilization, same day as procedure.	

Guiding principle: All women whose life is in danger shall have access to abortion care services and all women who have complications of abortion shall have access to quality postabortion care services, including rights-based postabortion contraceptive counselling and services to help prevent future unintended pregnancies. This includes respecting a woman's right to choose which uterine evacuation method is right for them when eligible for both MVA and Medical methods, whether to take contraception or not and to make available a variety of contraceptive methods to help her choose a method that is right for her.

Step 1: Assesses the client

Guidelines:

- 1. Treat the client with full respect. See table 2(2.1) for details.
- 2. Rule-out shock and other life-threatening conditions. See table 2(2.2) for details.
- 3. Take a targeted medical history focused on the abortion. See table 2(2.3) for details.
- 4. Provide rights-based counseling to help her choose a method and provide choice method at the end of consultation if client desires.
- 5. Explain the nature and purpose of the examination to the woman and get a consent
- 6. Perform hand hygiene. See table 2(2.5) for details.
- 7. Perform a general physical examination and assesses the patient for signs of serious complications. See table 2(2.6) for details.
- 8. Order or perform laboratory tests if necessary.
- 9. Explain findings to the client or guardian, where necessary.

Step 2: Conduct a pelvic examination

- 1. Gather informed consent from client and ask client to empty her bladder.
- 2. Perform hand hygiene and put on examination gloves.
- 3. Perform bimanual examination, check uterine size based on LMP and examination findings, and assesses shape and position of the uterus.
- 4. Perform a speculum examination.
- 5. Remove any visible products of conception (POC) from vaginal canal, and notes if there is a foul-smelling discharge, the amount of bleeding and whether the cervix is open or closed
- 6. Check for vaginal or cervical trauma (tears, perforations, foreign bodies or any signs of interference) or abnormal discharge from the cervical os.
- 7. Check for cervical dilatation and excitation, pelvic masses, and pelvic pain, noting severity and location.
- 8. Infection prevention and instrument processing steps as per MOH infection prevention guidelines. Immerse gloved hands in 0.5% chlorine solution, remove gloves and dispose them in appropriate container.
- 9. Perform hand hygiene.
- 10. Explain findings to the client or if necessary, to guardian.

 Table 2 Useful information on steps 1 & 2

	Treating the client respectfully
2.1	reading the chefit respections
	Introduce yourself.
	■ Greet the woman and her partner or companion (if present and woman is okay having
	the partner around) in a cordial manner.
	Privately, confirm if the woman is comfortable having someone with her or prefers
	being alone. Call client by her name or appropriate title.
	 Can cheft by her name of appropriate title. Show concern and respect client culture, beliefs, and ideas.
	 Speak using easy-to-understand language.
2.2	Ruling out shock and life-threatening conditions
2.2	
	Check level of consciousness.
	Check BP, Pulse rate, Respiration rate and Temperature.
	• Check for anemia.
	Check for distended abdomen. Check for distended abdomen.
	 Check for bleeding. If any complications are identified, stabilize patient and transfer if necessary.
	 Confirm any conditions that places the life of the woman in danger.
	Targeted medical history focused on abortion
2.3	
	Biographic (personal) information.
	Missed period (how long ago did she have her last normal menstrual period).
	Past obstetric history.
	If the pregnancy was intended.Current contraceptive method used.
	 Vaginal bleeding (color and consistency).
	 Cramping (duration and severity).
	Abdominal or shoulder pain (may indicate ruptured ectopic pregnancy or
	intraabdominal injury).
	 If she has passed tissue (POC).
	If she has fever, chills, malaise.
	If she fainted.
	If she has inserted any foreign body into the cervix and uterus. Windows in the continuous interest in the continuous int
	 Whether patient has taken any herb, medicine or poison that may have serious side effects.
	 History of recurrent abortion and cause.
	Surgical history.
	Social history.
	Other health conditions e.g. Malaria.
	 Drug allergies.
	• TTV received.
	Bleeding or clotting disorder. Brain disferential formulation or investigation of the state of the stat
2.4	Required information for supporting an incomplete abortion diagnosis
2. T	 Amenorrhea or gestational age of 28 weeks or less.
	Per vaginal bleeding.
	 Lower abdominal pain and/or cramping.
	 Uterus size less than expected for the gestation age (see appendix 1 on pregnancy
	dating by physical examination).
	Retained Products of Conception (RPOC) on Ultrasound scanning (if available).
	Open cervical os.
2.5	Hand hygiene for infection prevention
4.3	Week hands with water and soon for 40 60 seconds poving attention to account
	Wash hands with water and soap for 40-60 seconds, paying attention to areas under the fingernails and between the fingers; dries hands with an individual clean towel or air dry.
	Wet hands with water. Wet names with an individual clean tower or air dry. Wet names with water.
	 Apply enough soap to cover all hand surfaces.
	11 2 O I

	 Right palm over left dorsum with interlaced fingers and vice versa. Palm to palm with fingers interlaced. 	
	Backs of fingers to opposing palms with fingers interlocked.	
	Rotational rubbing of left thumb clasped in right palm and in left palm and vice versa.	
	Rinse hands with water.	
	 Rotational rubbing backwards and forwards with clasped fingers of right hand in left. 	
	palm and vice versa.	
	Dry hands with individual towel or air dry.	
	OR	
	Rub both hands with approximately 5 ml of alcohol gel 70% for 20-30 seconds, paying	
	attention below to the areas under the fingernails and between the fingers, until dry.	
	 Apply a palmful of the product in a cupped hand to cover all hand surfaces. 	
	Rub hands palm to palm.	
	Right palm over left dorsum with interlaced fingers and vice versa.	
	Palm to palm with fingers interlaced.	
	 Backs of fingers to opposing palms with fingers interlocked. Rotational rubbing of left thumb clasped in right palm and in left palm and vice versa 	
	 Rotational rubbing of left thumb clasped in right palm and in left palm and vice versa. Rotational rubbing backwards and forwards with clasped fingers of right hand in left 	
	palm and vice versa.	
	Note: See appendix ,2, 3 and 4 on guidance for handwashing and handrub	
	General physical examination	
2.6	Outer physical chammands	
	 Check general health of woman (malnourished, anemic, general poor health). 	
	 Check vital signs (temperature, pulse, respiration, blood pressure). 	
	 Conduct head to toe examination (Examine breast, chest (including lungs and heart), 	
	abdomen and extremities).	
	 Checks to see if bleeding is heavy, bright red, with or without clots. 	

Guiding principle: Manual vacuum aspiration shall be the main surgical method of management of abortion care and incomplete abortion as gestation age permits.

MVA is the preferred surgical treatment up to 14 weeks because ^{26,27,28,29}:

- Risk of complications is reduced therefore more likely for clients to stay shorter in clinic. Dilatation and curettage (D&C) are outdated and not an approved WHO technology. Furthermore, D&C is associated with higher rates of complications.
- Access to services is increased.
- Cost of services & consumption/use of resources is reduced.
- Immediate access to emergency care is much more likely.

Step 3: Treat the client according to examination findings

- 1. Ensure client is stable before proceeding with MVA/Evacuation/Misoprostol for PAC /Transfer.
- 2. Treat the client for severe vaginal bleeding or Hypovolemic shock, if necessary. **Details** in table 3 below (3.3, 3.4, 3.5, 3.6, 3.7, 3.8).
- 3. Treat the client for infection or septic shock, if necessary. **Details in table 3 below (3.3, 3.4, 3.5, 3.6, 3.7, 3.8).**

- 4. Treat the client for intra-abdominal injury, if necessary. **Details in table 3 below (3.3,** 3.4, 3.5, 3.6, 3.7, 3.8).
- 5. Conduct or prescribe laboratory tests and radiology examination if necessary

Step 4: Prepare for the Manual Vacuum Aspiration (MVA) procedure

- 1. Prepare the client for the MVA. **Details in table 3 below (3.1 and 3.2).**
- 2. Prepare the necessary equipment and supplies for MVA. Details in table 2 below (3.2).
- 3. Ensure that emergency backup is available (e.g., oxygen, IV line materials and emergency drugs).
- 4. Put on personal protective equipment: gum boots, a clean rubber or water-proof apron, goggles/eye protection, and face mask.
- 5. Perform hand hygiene and put on surgical or sterile gloves.
- 6. Confirm that required sterile or high-level disinfected instruments, including MVA and the appropriate size cannula are available.
- 7. Arrange sterile and high level disinfection (HLD) instruments on HLD trolley.
- 8. Charge the MVA syringe.
- 9. Drape the patient using clean drapes.
- 10. Remove gloves after immersing in 0.5% chlorine and disposes them in the appropriate container.

Table 3. Useful information for steps 3 & 4		
Routine Aspects		
3.1	Preparing the client for MVA	
	 Explain to the client about her condition and treatment plan. Discuss the client's reproductive goals, as appropriate. Ensure the necessary privacy and confidentiality. Encourage the client to ask questions and addresses them. Get client informed consent to proceed with the procedure. Tell the client in advance that she may feel discomfort during some of the steps of the procedure. Ask the patient about allergies to antiseptics, analgesia and anesthetics. Ask/check that the client has recently emptied her bladder. Check that the patient has thoroughly washed and rinsed her perineal area. Ask or Assist the client to lie on the MVA bed. Administer analgesic as per guidelines if possible, pethidine or morphine. Preprocedure strong non-steroidal anti-inflammatory drugs (NSAIDs) combined with oral diazepam given 30 minutes prior are also effective at managing pain from MVA.WHO recommends an oral NSAID and a paracervical block for all MVA procedures. Narcotics may be used if available. Administer prophylactic antibiotics (Doxycycline, Azithromycin or Metronidazole single dose) for induced surgical abortion-MVA 30 minutes before the procedure. However, the procedure should not be stopped due to lack of prophylactic antibiotics. 	
	Indications for MVA ^{26,30}	
	 Gestational age less than 14 weeks. If according to legal framework ToP is accepted MVA can be used as mean of inducing abortion up to gestation age of 12 to 14 weeks requires cervical priming with 	

	Misoprostol 400mcg 3 hours before the procedure when administered sublingually, buccally or vaginally. Wait for 3 hours assess if priming has happened then proceed with MVA. Priming may be done using dilators. Osmotic dilators are effective and less painful than hard metal dilators. When placed in the closed cervix, osmotic dilator absorbs moisture from the tissues surrounding the cervix and swells, opening the cervix slowly and with little discomfort. ^{27,29,30}
	Indication for Evacuation under anesthesia Gestational age more than 14 weeks.
2.2	Equipment and Supplies for MVA
3.2	
	Bivalve speculum (medium). The state of the speculum is a specific product of the specific product of the speculum is a specific product of the specific pro
	Tenaculum or Vulsellum forceps. Spange holding forceps (2)
	 Sponge holding forceps (2). 20 ml syringe or 2 10mL syringes, 3cm 22-gauge needles and 20mL of 1% lidocaine
	(for Paracervical block).
	MVA instruments:
	 MVA vacuum syringes, single or double valve.
	o Flexible cannulas of different sizes
	O Adapters O Siligona for lubricating MVA surings O ring
	 Silicone for lubricating MVA syringe O-ring Light source (to see cervix and inspect tissue).
	Swabs/gauze. Swabs/gauze.
	Antiseptic solution (preferably an iodophor such as Povidone iodine, Betadine (1%), or
	Chlorhexidine.
	• Gloves, sterile or high-level disinfected surgical gloves or new examination gloves
	Utility gloves.
	 Strainer (for tissue inspection). Simple magnifying glass (x 4-6 power) (optional).
	 Clear container or basin (for tissue inspection).
	Test container of busin (for ussue inspection).
	In case of emergency the following may be required ^{26,27,28,29,30}
	Supplies for starting an IV line
3.3	
	■ 16- or 18-gauge needle or cannula.
	IV cut down set.
	Container for taking blood sample.IV fluids.
	Sterile swabs (alcohol based).
	Giving set.
	 Adhesive tape.
	■ Sharp container.
2 1	Equipment and supplies for administering oxygen
3.4	
	 Oxygen cylinder or oxygen concentrator or central supply source in working order. Nasal prongs or mask.
	- Nasai prongs of mask.
	Supplies for bladder catheterization
	Bladder catheter.
	 Urine collection bag.
	Catheterization set.
3.5	Evaluating the woman's response to the immediate treatment
5.5	Re-assess the woman every 15 minutes:
	• Pulse rate.
	Respiratory rate.
	o Blood Pressure (BP).
	 Mental state and level of consciousness (confusion).

	 Fluid balance using input and output chart.
	 Keep the woman warmly covered.
	What to do if the conditions improve? (pulse of 90 or less, systolic BP of 100 mmHg or
	more, at least 30 ml of urine per hour and less anxiety/confusion):
	 Adjust IV infusion to 1 L over a six-hour period (60 drops/minute).
	Continue to monitor vital signs and loss of blood every 30 minutes.
	Community to monitor than again and loss of clood overy community
	What to do if the conditions do not improve:
	 Continue IV fluids.
	■ Continue to administer oxygen 6–8 L/minute.
	 Continue to monitor vital signs and fluid balance.
	 Reassess for causes or transfer the patient to the next level of care.
26	 Start I/V fluids or oral fluids depending on condition.
3.6	• Postabortion care only: Antibiotics are not always required. When signs of
	infection present antibiotics can be provided according to microbial sensitivity. If
	severe infection found, prescribe IV antibiotics or refer to an appropriate level of health
	care. The antibiotics may include Ampicillin and Gentamycin and Metronidazole, or Ceftriaxone and Metronidazole.
	• For abortion: Single oral dose Doxycycline 200mg, Azithromycin 500 mg or
	Metronidazole 400 mg should be given before the procedure but if not available should
	not prevent care.
	• Postabortion care only: Give tetanus toxoid, if necessary (dosing schedule is as
	follows, for women aged 15-49: 1st, 2nd doses 4 weeks apart, 3rd dose 6 months from
	the 2 nd dose, and 4 th and 5 th dose 1 year apart).
	 Administer Ibuprofen 400mg tds.
	 Ensure patient is stable before proceeding with MVA/ evacuation/MPAC/transfer.
	Immediate treatment to be given for management of hypervalence sheets
3 7	Immediate treatment to be given for management of hypovolemic shock
3.7	
3.7	 Maintain airways.
3.7	 Maintain airways. Administer oxygen to the woman, 6–8 L/minute by nasal prongs or mask.
3.7	 Maintain airways. Administer oxygen to the woman, 6–8 L/minute by nasal prongs or mask. Start two IV lines using a 16- or 18-gauge.
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	 Maintain airways. Administer oxygen to the woman, 6–8 L/minute by nasal prongs or mask. Start two IV lines using a 16- or 18-gauge. Perform IV cut down if the vein is not accessible. Take a blood sample for performing full blood count (FBC)/hemoglobin, coagulation, and blood group and Rh (cross-matching). Requests blood. Replace fluids with appropriate replacement fluids: With Normal saline or Ringer's Lactate solution 1 L over a 15–20 minutes period (wide open rate) in each line Label IV bags with bed number and medications added, if any Administer at least two additional liters of this solution during the first hour Continue to replace volume IV in accordance with the loss of blood (two or three times the estimated loss). Management of intra-abdominal injury/ ectopic pregnancy Start I/V fluids; Ringer's Lactate or Normal Saline – gives 1 liter immediately then 1-2 more liters over 4-8 hours Keep the patient nothing by mouth.
	 Maintain airways. Administer oxygen to the woman, 6–8 L/minute by nasal prongs or mask. Start two IV lines using a 16- or 18-gauge. Perform IV cut down if the vein is not accessible. Take a blood sample for performing full blood count (FBC)/hemoglobin, coagulation, and blood group and Rh (cross-matching). Requests blood. Replace fluids with appropriate replacement fluids: With Normal saline or Ringer's Lactate solution 1 L over a 15–20 minutes period (wide open rate) in each line Label IV bags with bed number and medications added, if any Administer at least two additional liters of this solution during the first hour Continue to replace volume IV in accordance with the loss of blood (two or three times the estimated loss). Management of intra-abdominal injury/ ectopic pregnancy Start I/V fluids; Ringer's Lactate or Normal Saline – gives 1 liter immediately then 1-2 more liters over 4-8 hours Keep the patient nothing by mouth.
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	 Maintain airways. Administer oxygen to the woman, 6–8 L/minute by nasal prongs or mask. Start two IV lines using a 16- or 18-gauge. Perform IV cut down if the vein is not accessible. Take a blood sample for performing full blood count (FBC)/hemoglobin, coagulation, and blood group and Rh (cross-matching). Requests blood. Replace fluids with appropriate replacement fluids: With Normal saline or Ringer's Lactate solution 1 L over a 15–20 minutes period (wide open rate) in each line Label IV bags with bed number and medications added, if any Administer at least two additional liters of this solution during the first hour Continue to replace volume IV in accordance with the loss of blood (two or three times the estimated loss). Management of intra-abdominal injury/ ectopic pregnancy Start I/V fluids; Ringer's Lactate or Normal Saline – gives 1 liter immediately then 1-2 more liters over 4-8 hours Keep the patient nothing by mouth. Determine hemoglobin, hematocrit and blood group typing for possible blood transfusion
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Step 5: Perform the MVA procedure

- 1. Administer pre-procedure antibiotics if indicated **Details in table 3 above (3.6)**
- 2. Perform hand hygiene according to protocol.
- 3. Put new sterile gloves on both hands.
- 4. Perform 6 swab technique to clean the vulva using Chlorohexine if required.
- 5. Insert speculum appropriately, removing blood and/or tissue from vagina, any PoC protruding from the cervical os, check vaginal wall and cervix for tears/lacerations, and clean cervix and vagina two times with antiseptic using gauze or cotton sponge.
- 6. Administer paracervical blockade by using aseptic technique, (see Table 4 below 4.1) inject 2mL lidocaine 1% without epinephrine at 12 o'clock position of cervix, then clamp single tooth Tenaculum or Vulsellum forceps on upper lip of cervix. Inject the remaining lidocaine (18mL) in equal amounts at the cervicovaginal junction at the 2, 4, 8, and 10 o'clock positions. If no drugs for paracervical blockage available administer other potent pain killers (narcotic or non-narcotic,/non-steroidal)well in advance (20-30 min)
- 7. Give the client verbal support along the entire procedure. **Details in Table 4 below.**
- 8. While holding the cervix steady and gently applying traction, insert the cannula.
- 9. Push the cannula slowly into the uterine cavity until it touches the fundus, note the seize of the cavity and withdraw the cannula slightly.
- 10. Attach the prepared MVA syringe.
- 11. Release the pinch valve.
- 12. Evacuate any remaining contents of the uterine cavity by gently rotating the syringe and moving the canula forth and back going systematically. If the syringe is full, empty it and attach again and continue till uterus is empty.
- 13. Check for signs of completion: no further products bright red blood, glittering sensation, foamy blood in the cannula, gripping sensation on the cannula.
- 14. Withdraw the cannula.
- 15. Inspect the tissue removed from the uterus. Does it look normal or is sign of molar pregnancy.
- 16. Check for bleeding before withdrawing the speculum.
- 17. While still wearing gloves decontaminate all instruments by cleaning them with a suitable solution

Table 4. Useful information for step 5

4.1	Paracervical block
4.1	NOTE: WHO recommends administering the paracervical block for all MVA procedures. It is helpful for the pain produced by the dilation process, for the friction from the cannula passing through and rotating in the cervix, and for pain associated with uterine aspiration. ^{26,41,42,43}
	 Fill a 20mL or 2 10ml syringes with local anesthetic (20mL of 1% lidocaine without epinephrine). Inject 2mLs of lidocaine into the anterior lip of the cervix where the Tenaculum/Vulsellum forceps will be placed (typically 6 or 12 o'clock position). Grasp cervix with the tenaculum at 12 o'clock With tenaculum/Vulsellum forceps on the cervix, use slight traction and movement to help identify the area between the smooth cervical epithelium and the vaginal tissue (the cervicovaginal junction). Inject about 4ml of the anesthetic under the epithelium, to a depth of at least 3cm, at the 2, 4, 8 and 10 o'clock positions into the cervicovaginal junction. Insert the needle and aspirate to make certain the needle is not penetrating a blood vessel. The 3 and 9 o'clock
	locations are not recommended to avoid vasculature. Begin the procedure without delay. Avoid intravascular Lidocaine administration NB: Check appendix 5 on paracervical block technique.
4.2.	Other analgesic medication
1020	Pethidine Ibuprofen See more details in appendix 8
4.3	Verbal support to the client during the MVA procedure
T••	 Talk with the patient throughout the procedure. Talking with the client throughout the procedure could help reduce the perceived pan (verbocaine).²⁹ Explain each step of the procedure prior to performing it. Ask the client throughout the procedure if she is experiencing any pain. Encourage the client to ask questions. Wait after performing each step or task for client to prepare for next one. Avoid saying things like "This won't hurt" when it will hurt, or "I'm almost done" when he/she is not.

Step 6: The provider completes the infection prevention and control procedures after MVA

- 1. Dispose waste materials in a leak proof container with plastic bag.
- 2. After use, do not let the used cannula or MVA device dry. Soak or flush the used cannula and MVA syringe with water or spray with an enzymatic cleaner(with your gloves still on).
 - NOTE: WHO and Centre for Disease Control no longer recommends the "decontamination soak" of instruments with Chlorine as part of instrument processing. ^{31,32} The Ministry of Health through the quality management is changing the infection prevention guidelines directorate to remove the decontamination stage.
- 3. MVA instrument processing: MVA cannulas are critical items therefore require either HDL or sterilization. ^{28,29,31,32}

- a. Disassemble and clean instruments in warm water with detergent, and rinse in clean water.
- b. All aspirators and cannulas must be HLD or sterilized according to manufacturer instructions. If chemical processing, rinse appropriately to remove chemicals before storage.
- c. Sterilization for cannulas can be through heat-autoclaving or chemical sterilization using Glutaraldehyde 2.4% for 10 hours please check manufacturer information as some cannulas are not autoclavable.
- d. Aspirators and adapters may be dried, the O-ring lubricated, and the device reassembled and stored in a clean, dry area until use. The aspirator does not need to remain high-level disinfected or sterilized and can be placed in a clean area or stored according to local standards. Cannulas must remain sterile or high level disinfected until next use. Store cannulas in either sterile or high level disinfected containers to preserve the level at which they were processed. Handle cannulae by the base ends.
- e. Instruments processed by wet methods should be reprocessed daily.
- f. Inspect cannulas and instruments to ensure they are not damaged or brittle. Any that are dirty, decaying or otherwise not fit for purpose should be disposed of and replaced.
- 4. Empty PoC into utility sink, flushable latrine, placenta pit or container with tight-fitting lid.
- 5. Clean bed using towel with 0.5% chlorine solution.
- 6. Immerse both gloved hands in 0.5% chlorine solution, removes gloves by turning inside out, and places them in an appropriate container.
- 7. Wash hands with water and soap or use disinfectant.

Step 7: Counsel the client after the MVA procedure

- 1. Record findings and events during the MVA procedure in the appropriate procedure logbook (register). Monitor the client during post-MVA. **Details in table 5 below.**
- 2. Use effective communication skills.
- 3. Give the client post-MVA information. **Details in table 5 below.**
- 4. Provide rights-based counselling to help her choose a method and provide choice method if client desires. If complete evacuation confirmed and no signs of infection, all contraceptive methods are appropriate.
- 5. Provide the client the selected method and gives her instructions for its adequate use
- 6. Identify other client's reproductive health needs and make the appropriate referrals/appointments.
- 7. Ask the client to return if any problem.
- 8. Record relevant information in the client's health passport.
- 9. Instrument processing steps required for the MVA syringe and cannula should follow Manufacturer instruction and have been explained in standard 7.

NB: The processing should be conducted consistent with Ministry of Health Infection Prevention Guidelines and change in line with new evidence in the guidelines.

Table 5 Useful information for step 7

- 4	Monitoring the client after MVA
5.1	
	 Monitor the client's vital signs (blood pressure, temperature, pulse rate, respiration rate) over the course of the one to two hours following the procedure. If sedatives were used, check client's level of consciousness every half hour at a minimum, until client is fully alert. Continue treatment as required. Check for severe vaginal bleeding. Check contraction of uterus if there is severe bleeding Check degree of pallor and whether pallor is worsening. Check for persistent or worsening abdominal pains. If possible, determine blood group. If client is Rhesus negative administer Rhesus (Anti-D) immunoglobulin within 72 hours for gestation ages more than 12 weeks³⁰ (if available). Give tetanus toxoid, if necessary (dosing schedule for women aged 15-49: 1st and 2nd doses 4 weeks apart, 3rd dose 6 months from the 2nd dose, and 4th and 5th dose 1 year apart).
	Record all necessary information.
5.2	Post-MVA information to the client
3.4	 Explain how the procedure went. The client may return to fertility as early as 8 days post procedure hence advise client on contraceptives use.⁴⁴ Signs of normal recovery (decreased cramping and bleeding, return of normal menses in 4-8 weeks). Post procedure care – May resume sexual intercourse 3 days after she stops bleeding and she feels comfortable. Contraceptive counselling and contraceptive method of choice avoid insertion of foreign bodies into the vagina; avoid vaginal douching. When and where to return for follow-up care if needed but should not be mandatory. Explain danger signs that may arise – prolonged/increasing cramping or bleeding, severe/increasing pain, fever/chills/malaise, fainting. Advise the client to return immediately if complications arise.

Chapter 3. Medical Protocol for Abortion and Post Abortion Care

Advances in medical practice, and the advent of safe and effective technologies and skills could eliminate unsafe abortions and related deaths entirely, provided universal access to these services is available. One key advance has been the discovery of drugs used for offering abortion and post abortion care services.

Table 6 Advantages and disadvantages of using Medical protocol (e.g. Misoprostol) for abortion and post abortion care vs surgical methods (Adapted from IPPF guidelines).²⁷

Disadvantages
Waiting, which may lead to uncertainty.
Has a higher risk of incomplete or failed
abortion. Misoprostol alone has a failure rate of about 17%.
Requires more clinic visits to ascertain completion.
For good effectiveness requires adherence to
the dosages.
Bleeding, cramping, nausea, diarrhoea and
other side-effects.

3.1. Medical abortion for post abortion care in the first trimester

First visit:

- Confirm the diagnosis of incomplete or missed abortion with a uterine size at 12 weeks and below.
- History and a physical and vaginal examination (refer to steps 1-3 Chapter 2).

(The history of amenorrhoea in a woman of reproductive age associated with symptoms of pregnancy who presents with considerable vaginal bleeding associated with clots and passage of fleshy products of conception, a uterine size that may be less than the gestational age, active vaginal bleeding with an open cervix). Routine use of a pregnancy test and ultrasonography is not essential for making the diagnosis if the there is a history or existing bleeding and an open cervical os. Always rule out ectopic pregnancy first.

• Assess the client for any possible complications that will need urgent treatment (these to include severe vaginal bleeding, shock, severe pain, sepsis and proven or suspected uterine perforation.

- Assess and rule out serious complications that require more specialised care including surgery
- Establish any possible contraindications and or precautions to the use of Misoprostol in the woman.

Contraindications include:

- o Known allergic reaction to misoprostol.
- o Known or suspected ectopic pregnancy.

Precautions include:

- Intra uterine contraceptive device (IUD) in place (remove IUD then offer treatment).
- Serious/unstable health problems, including but not limited to hemorrhagic disorders.
- Inform the woman about the available methods of uterine evacuation (*MVA and Misoprostol*). Explain and ensure she makes an informed choice and consent.
- Provide information on the rapid return of fertility and offer her appropriate family planning counselling and method provision, including scheduling a follow up visit if she desires a method, such as an IUD, that cannot be provided that day.
- For incomplete abortion, provide a single dose of 600 micrograms of Misoprostol orally or 400mcg of misoprostol sublingually or vaginally as a directly observed treatment to the woman, along with medication for pain control.
- For missed abortion, which is usually diagnosed by ultrasound since os is usually closed and bleeding may not be present, the gold standard regimen is mifepristone 200 mg followed by misoprostol (within 24-48 hours). However, Misoprostol alone may also be used. Where Misoprostol alone, give 600mcg sublingually or, in the absence of vaginal bleeding, 800mcg vaginally every 3 hours until expulsion (generally 1-3 doses).
- Let the client wait in clinic for 30 minutes and attend to her if she expels the products (some women may expel the POCs within 30 minutes and you may need to provide another dose if the client vomits within 30 minutes).
- Prophylactic antibiotics are not indicated routinely. Only provide if signs of infection.
- All women should be given medicine to take for pain management along with misoprostol, preferably a non-steroidal anti-inflammatory drug.
- Explain the expectations to the client and ensure that she has understood. Attend to her questions.
- Provide her with the information of when to return to the clinic (warning or danger signs) includes prolonged heavy bleeding (soaking through more than 2 pads or sarongs an hour), prolonged cramping beyond 48 hours, fever, malaise and foul-smelling discharge. Information on who to call or where to go if she is concerned will be provided.

- Explore other reproductive health issues pertinent to the client (e.g. anaemia, domestic violence, prevention and/or recognition/diagnosis of sexually transmitted infections, including HIV/AIDS) and manage or refer as indicated.
- Provide routine follow up information. Clients should return for a follow-up visit 2 weeks after the Misoprostol is taken.
- Discharge the patient according to the local procedures.

Follow up visit:

Routine follow-up is not required after using misoprostol for treatment of PAC. Of course, the woman should be told she can return at any time for questions or concerns. Given the high efficacy of treatment and since most women won't return for follow-up it is highly recommended that women receive their contraceptive method of choice at initial visit.

If required, schedule follow up visit within two weeks:

- Evaluate patient and be sure of the success of the treatment:
- Place IUD if desired

Completion of the abortion should be confirmed by history and bimanual examination. *Generally, ultrasound is not necessary to confirm completion of miscarriage.*

Symptoms and signs of completion include:

- Normal uterine size
- Absence of uterine tenderness
- Closed cervical os
- Woman's reports of symptoms experienced during treatment (such as bleeding patterns, or period of cramping followed by resolution)
- Minimal or absent bleeding
- Resolution of cramping
- ✓ Confirm the absence of complications.
- ✓ You can provide women with the choice of another dose of Misoprostol (if no signs of complications) or Provide MVA if she has not had complete expulsion of the POCs.
- ✓ Address any remaining concerns, questions, or other needs (such as family planning.
- ✓ Discuss self-care and sex. Can be resumed when woman is comfortable. Arrange for cervical cancer screening if patient not screened in the past one year.

Signs of complication for which women should return or present to the nearest facility:

The woman should be told to come back or present to the nearest facility if they have any of the following:

1. Abnormal bleeding

- Soaking more than 2 heavy pads per hour for 2 hours or more with or without clots after an hour of expulsion of POCs. Heavy bleeding that occurs after bleeding had slowed down or stopped.
- Feeling light-headed or dizzy during or after bleeding.

2. Infection

- Fever or chills for more than 24 hours after taking Misoprostol.
- Severe pelvic or abdominal pain (that lasts for long and does not respond to the simple analgesics given).
- Foul-smelling or purulent vaginal discharge.
- Marked abdominal tenderness.

3. If woman presents with complaints or worries

- Perform a thorough assessment: careful history, systemic and pelvic examination and necessary directed investigations
- Provide proper treatment for the identified concern for the unscheduled visit

3.2. Provision of medical abortion

Provision of medical abortion is very safe and effective (as safe as surgical abortion) and legal in Malawi when the life of the woman is in danger. The regimen depends on available drugs. And the dosages depend on gestation age. Mifepristone and Misoprostol combination regimen are more effective and have fewer side effects than Misoprostol only regimen.

Clients can have Medical abortion at home up to 12 weeks of gestation. After 12 weeks gestation age, the procedure must be conducted at the facility. Well-equipped health centres may offer services in the first trimester, but all other gestation ages should be referred to the hospital for safe care especially due to availability of higher cadres of health care. ^{27,28,29,30,26}

All the steps are the same as in PAC (see section 3.1 above) except for the dosages and combination regimen.

Abortion regimen have different effectiveness. Table 7 below, demonstrates the various effectiveness of the regimens.

Table 7 Regimens for medical abortion and their effectiveness.

Regimen	Gestational age	Effectiveness	Continuing	Complication	
			pregnancy rate	rate	
Mifepristone + misoprostol	Up to 10 weeks	97%	<2%	<1%	
Mifepristone + misoprostol	10-13 weeks	92-96%	<2%	3%	
Misoprostol only	Up to 13 weeks	80-85%	3-10%	1-4%	

Source: IPAS clinical updates in reproductive health. Safety and effectiveness of medical regimens.

For first trimester abortion, if mifepristone is available, it is best practice to use it in combination with misoprostol as it shortens the induction—abortion interval, reduces side effects and decreases the rate of ongoing pregnancy (see Appendix 6).

If used in combination, Mifepristone 200 mg should be administered orally 24–48 hours before misoprostol.

• Misoprostol may be given by the vaginal, buccal or sublingual route.

Refer to Appendix 6 for more information on dosages for various regimens.

Women do not need to return to the clinic to take misoprostol. They should be given the drugs and given clear explanations on how to self-administer 1-2 days later.

Medical Abortion >12 weeks from last menstrual period

Dosages for medical abortion beyond 12 weeks of gestation are outlined in appendix 6. For pregnancies beyond 24 weeks, the dose of misoprostol should be reduced, owing to the greater sensitivity of the uterus to prostaglandins, but the lack of clinical studies precludes specific dosing recommendations. This should be done at a referral hospital and requires admission.

NB: Studies have shown that continued pregnancy after Misoprostol, use in first trimester may result in congenital abnormalities at birth.^{33,34,35} Therefore, once a client has been initiated on the medical abortifacient, the pregnancy must not continue, and surgical termination should be an option for failed medical procedure.

Medication for pain management for comprehensive abortion care

- For both medical and surgical procedures, analgesia (pain relief) should **always** be offered and provided without delay.
- For medical uterine evacuation, non-steroidal anti-inflammatory drugs are recommended either prophylactically or at the time cramping begins. Narcotic analgesics and non-pharmacologic, supportive techniques (such as educating the patient about what to expect during the uterine evacuation, providing verbal support, applying a heating pad or hot water bottle to the lower abdomen for cramping) may be helpful.
- For uterine aspiration, a combination or paracervical block and non-steroidal antiinflammatory drugs for pain management is recommended. Additional measures such as narcotic analgesics, anxiolytics and non-pharmacologic, supportive techniques (such as educating the patient about what to expect during the uterine evacuation, providing verbal

support (verbocaine), applying a heating pad or hot water bottle to the lower abdomen for cramping) may be helpful. Intravenous sedation, where available, may be offered.

- Prophylactic paracetamol is ineffective in reducing pain during both surgical and medical abortion.
- For dosage see Annexe 8

Chapter 4: Postabortion contraception

Given the high efficacy of treatment and since most women won't return for follow-up it is highly recommended that women receive their contraceptive method of choice at initial visit (add chart showing that all methods except IUD can be offered starting day 1).

Postabortion contraception is a safe and effective service that must be offered to every woman before leaving a health facility after receiving postabortion or abortion services. It includes counselling for and provision of a contraceptive method of the client's choice and according to eligibility. Where the method of choice is not available, the woman should be referred to another facility for the service. Postabortion contraception is an integral part of comprehensive abortion care which mandates the availability and provision of contraceptive methods as soon as possible after an abortion. Fertility may return as soon as 8 days following abortion and early contraception prevents another unintended pregnancy.

Generally, almost all methods of contraception can be initiated immediately after surgical or medical abortion care. For surgical procedures, contraception can be initiated at the time of the procedure immediately after. For medical procedures, most contraceptives can be offered with the first pill of the medical abortion regimen. IUDs should be offered if no signs of infection. See Appendix 7 for appropriate choices of contraceptives that maybe offered.

Counselling should include effectiveness, advantages, disadvantages, contraindications, risks and benefits of the client's choice or appropriate alternative in line with the Ministry of Health guidelines.

Chapter 5: Task sharing abortion and postabortion care provision to increase access and quality

To ensure client safety and provision of high-quality services, abortion and postabortion care services should be provided by qualified and trained health care workers in a safe environment. For surgical services, the facility should meet all minimum standards. Due to shortage of staff, certain services may be task shifted to other cadres.

Table 8 below guides on which cadres may offer abortion and post abortion care services in Malawi.

Table 8 Health care workers cadres in Malawi and the abortion and postabortion care services they can provide.

Service	Community Midwifes	Pharmacy Assistants	Pharma- cists	Medical Assistants	Clinical Officers	Nurse Midwife Technicians	Registered Nurses	Non- Specialist Doctors	Specialist Doctors
Vacuum aspiration for induced abortion		X			Ø	Ø	Ø	Ø	Ø
Vacuum aspiration for management of uncomplicated incomplete abortion			×		Ø		⊘	Ø	>
Medical abortion in the first trimester		See ** below	See ** below		Ø		②	Ø	Ø
Medical management of uncomplicated incomplete abortion.		×	×	Ø	Ø		Ø	Ø	Ø
Second trimester procedures		×		×				Ø	Ø
Third Trimester procedures									Ø

** There is no recommendation for independent provision of medical abortion (MA) from WHO and it is currently an area of research. Dispensing medications on prescription is within the typical scope of practice of these health workers and should be continued. Administering the medications and managing the process and common side-effects independently is also within their scope of work. Therefore, clients can present to pharmacists and pharmacy technicians for side effects management. However, assessing eligibility for medical abortion and post abortion care, and assessing completeness of the procedure and the need for further clinic-based follow-up is the responsibility of clinical staff (nurses and clinician, doctors).

Second and third trimester procedures should be provided at higher levels of health care where trained clinical officers, doctors and specialists are available.

References

- Ganatra B, Caitlin Gerdts, Clémentine Rossier, Brooke Ronald Johnson Jr, Özge Tunçalp, Anisa Assifi, Gilda Sedgh, Susheela Singh, Akinrinola Bankole, Anna Popinchalk, Jonathan Bearak, Zhenning Kang, Leontine Alkema., (2017). Global, regional, and subregional classification of abortions by safety, 2010–14: estimates from a Bayesian hierarchical model. *The Lancet*, *Vol. 390*, 2372–81; Published Online: September 27, 2017 http://dx.doi.org/10.1016/S0140-6736(17)31794-4
- 2. National Statistical Office (NSO) [Malawi] and ICF., (2017). *Malawi Demographic and Health Survey 2015-16*. Zomba, Malawi, and Rockville, Maryland, USA. NSO and ICF.
- 3. Polis CB, Mhango C, Philbin J, Chimwaza W, Chipeta E, et al., (2017). Incidence of induced abortion in Malawi, 2015. *PLOS ONE 12(4)*: e0173639. https://doi.org/10.1371/journal.pone.0173639
- 4. Palamuleni, M., and Adebowale, A., (2014). Prevalence and Determinants of Unintended Pregnancies in Malawi. *African Population Studies*, *Vol. 28*, *No.1*, April 2014. Retrieved on 01/25/2015 from: http://www.bioline.org.br/pdf?ep14010
- 5. Berer M. (2017). Abortion Law and Policy Around the World: In Search of Decriminalization. *Health and human rights*, *19*(1), 13-27. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5473035/#r3
- 6. Report of the International Conference on Population and Development, Cairo, 5-13 September 1994 (United Nations publication, Sales No. E.95.XIII.18)
- 7. Declaration on the occasion of the twenty-fifth anniversary of the International Conference on Population and Development, February 2019.
- 8. Ministry of Health, (2017). *National Sexual and Reproductive Health and Rights (SRHR) Policy 2017-2022*. November 2017, Malawi: United Nations Population Fund.
- 9. World Health Organization, (2015). *Health worker roles in providing safe abortion care and post abortion contraception*. ISBN 978 92 4 154926 4. (NLM classification: WQ 440). Page 3, paragraph 4.
- 10. World Health Organization (January 4th, 2019). *Constitution of WHO: principles*. Retrieved from https://www.who.int/about/mission/en/
- 11. World Health Organization, (2012). *Safe abortion: technical and policy guidance for health systems. Second edition.* Geneva, Switzerland: WHO Press. ISBN 9789241548434.
- 12. African Union, (2013). *Interpreting and Implementing Existing Abortion Laws in Africa*. Addis Ababa, Ethiopia.
- 13. African Union (2003). Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (Maputo Protocol). Maputo, Mozambique. Retrieved on 6th January 2019 from: http://www.achpr.org/instruments/women-protocol/
- 14. The Malawi Constitution. Retrieved on 6th January 2019 from: https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---ilo_aids/documents/legaldocument/wcms_125533.pdf

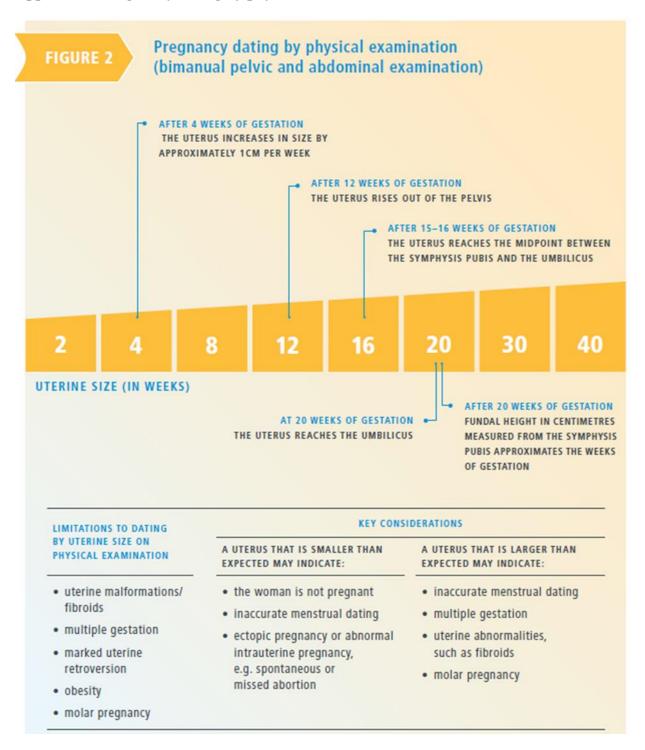
- 15. Malawi Gender Equality Act.
- 16. The Malawi public health Act.
- 17. Malawi Penal Code.
- 18. Benson J, Gebreselassie H, Amor Mañibo M, Raisanen K, Johnston HB, Mhango C and Levandowski BA, (2015). Costs of postabortion care in public sector health facilities in Malawi: a cross-sectional survey. *BMC Health Services Research*. 2015 15:562. https://doi.org/10.1186/s12913-015-1216-2
- 19. Brooke A. Levandowski, Chisale Mhango, Edgar Kuchingale, Juliana Lunguzi, Hans Katengeza, Hailemichael Gebreselassie and Susheela Singh, (2013). The Incidence of Induced Abortion in Malawi. International Perspectives on Sexual and Reproductive Health, 2013, 39(2):88–96, doi: 10.1363/3908813. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.364.6095&rep=rep1&type=pdf
- 21. Yuan S. M. (2016). Eisenmenger Syndrome in Pregnancy. *Brazilian journal of cardiovascular surgery*, 31(4), 325-329.
- 20. Levandowski BA, Pearson E, Lunguzi J, Katengeza HR, (2012). Reproductive health characteristics of young Malawian women seeking post-abortion care. *African Journal of Reproductive Health*. June 2012, Volume 16, Issue 2:253-61. http://www.jstor.org/stable/pdf/23318033.pdf
- 22. Mitrou, S., Zarkavelis, G., Fotopoulos, G., Petrakis, D., & Pavlidis, N. (2016). A mini review on pregnant mothers with cancer: A paradoxical coexistence. *Journal of advanced research*, 7(4), 559-63. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4921772/
- 23. Zagouri, F., Dimitrakakis, C., Marinopoulos, S., Tsigginou, A., & Dimopoulos, M. A. (2016). Cancer in pregnancy: disentangling treatment modalities. *ESMO open*, 1(3), e000016. doi:10.1136/esmoopen-2015-000016
- 24. Amant F, Loibl S, Neven P, Van Calsteren K. (2012). Breast cancer in pregnancy. *The Lancet*. February, 11th 2012; 379(9815):570-9. doi: 10.1016/S0140-6736(11)61092-1.
- 25. Nicholas A. Pavlidis. 2002. Coexistence of Pregnancy and Malignancy. *The Oncologist*. August 2002. vol. 7 no. 4 279-287. http://theoncologist.alphamedpress.org/content/7/4/279.long
- 26. World Health Organization, (2014). *Clinical Practice Handbook for Safe Abortion*. Geneva, Switzerland: WHO Press. ISBN 978 92 4 154871 7 (NLM classification: WQ 440).
- 27. Marcel Vekemans, First trimester abortion guidelines and protocols Surgical and medical procedures. International Planned Parenthood Federation (IPPF). Central Office.
- 28. IPAS guidelines. Clinical updates in reproductive health.
- 29. Marie Stopes, (2018). *International Guidelines for Safe Abortion and Post-Abortion Care*. Version 1. July 2018.

- 30. Royal College of Obstetricians and Gynaecologists, (2016). *Best practice in comprehensive postabortion care*. Best Practice Paper No. 3. London, March 2016.
- 31. World Health Organization and Pan American Health Organization, (2016). Decontamination and reprocessing of medical devices for health-care facilities. I. World Health Organization. II. Pan American Health Organization. ISBN 978 9241549851. (http://www.who.int) and PAHO web site (http://www.paho.org).
- 32. Centre for Disease Control, National Center for Emerging and Zoonotic Infectious Diseases. Division of Healthcare Quality Promotion, (2016). *Guide to infection prevention for outpatient settings: minimum expectations for safe care.* Version 2.3. September 2016. http://www.cdc.gov/HAI/prevent/prevent_pubs.html
- 33. N Bernard, E Elefant, P Carlier, M Tebacher, CE Barjhoux, MA Bos-Thompson, E Amar, J Descotes, T Vial, (2013). *Continuation of pregnancy after first-trimester exposure to mifepristone: an observational prospective study*. 24 January 2013 https://doi.org/10.1111/1471-0528.12147
- 34. Marine Auffreta, Nathalie Bernard-Phalipponb, Joëlle Dekempa, Patrick Carlierc, Marie Gervoise Boyerd, Thierry Vialb and Sophie Gautiera, (2016). Misoprostol exposure during the first trimester of pregnancy: Is the malformation risk varying depending on the indication? *European Journal of Obstetrics & Gynecology and Reproductive Biology*. Volumre 207. December 2016. http://dx.doi.org/10.1016/j.ejogrb.2016.11.007
- 35. Yedlinsky NT¹, Morgan FC, Whitecar PW, (2005). Anomalies associated with failed methotrexate and misoprostol termination. *Obstet Gynecol*. 2005 May;105(5 Pt 2):1203-5. DOI:10.1097/01.AOG.0000154002.26761.41. Retrieved from: https://www.ncbi.nlm.nih.gov/pubmed/15863582
- 36. Renner RM, Jensen JT, Nichols MD, Edelman AB, (2010). Pain control in first-trimester surgical abortion: a systematic review of randomized controlled trials. *Contraception*. Oregon Health and Science University, Portland. May 2010; 81(5):372-88. doi: 10.1016/j.contraception.2009.12.008. Epub 2010 Jan 27.
- 37. Rathod S, Samal SK, (2014). Successful pregnancy outcome in a case of Eisenmenger syndrome: a rare case report. J Clin Diagn Res. October, 2014; 8(10):OD08–OD09.
- 38. Linda Kalilani-Phiri, Hailemichael Gebreselassie, Brooke A. Levandowski, Edgar Kuchingale, Fannie Kachale, Godfrey Kangaude, (2014). International Journal of Gynecology and Obstetrics: www.elsevier.com/locate/ijgo Open access under CC BY-NC-ND license. http://dx.doi.org/10.1016/j.ijgo.2014.08.022 0020-7292
- 39. Franklin, W. J., Benton, M. K., & Parekh, D. R. (2011). Cardiac disease in pregnancy. *Texas Heart Institute journal*, *38*(2), 151-3. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3066821/
- 40. Voulgaris E, Pentheroudakis G, Pavlidis N. (2011). Cancer and pregnancy: a comprehensive review. *Surg Oncol*. December 2011. 20(4): e175-85. doi: 10.1016/j.suronc.2011.06.002. Epub 2011 Jul 5.
- 41. Lissauer, D., Wilson, A., Hewitt, C. A., Middleton, L., Bishop, J. R. B., Daniels, J., ... Coomarasamy, A. (2019). A randomized trial of prophylactic antibiotics for miscarriage surgery. N Engl J Med, 380, 1012-1021

- 42. Renner, R. M., Nichols, M. D., Jensen, J. T., Li, H., & Edelman, A. B. (2012). Paracervical block for pain control in first-trimester surgical abortion: A randomized controlled trial. *Obstetrics & Gynecology*, *119*(5), 1030-1037.
- 43. Renner, R. M., Edelman, A. B., Nichols, M. D., Jensen, J. T., Lim J. Y., & Bednarek, P. H. (2016). Refining paracervical block techniques for pain control in first trimester surgical abortion: A randomized controlled noninferiority trial. *Contraception*, 95(5), 461-466.
- 44. Stoddard & Eisenberg, 2011. Controversies in family planning: timing of ovulation after abortion and the conundrum of postabortion intrauterine device insertion. 2011 Aug;84(2):119-21. doi: 10.1016/j.contraception.2010.12.010. Epub 2011 Feb 11.
- 45. World Health Organization 2015. Department of Reproductive Health and Research, World Health Organization. Health worker roles in providing safe abortion care and postabortion contraception

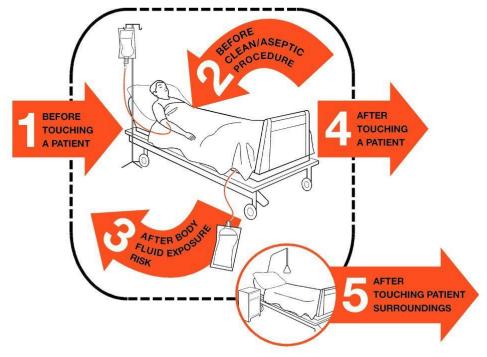
Appendices

Appendix 1. Pregnancy dating by physical examination



Source: Medical management of abortion, 2018. Page xii

Your 5 Moments for Hand Hygiene



ı	BEFORE TOUCHING A PATIENT	WHEN? WHY?	Clean your hands before touching a patient when approaching him/her. To protect the patient against harmful germs carried on your hands.
2	BEFORE CLEAN/ ASEPTIC PROCEDURE	WHEN? WHY?	Clean your hands immediately before performing a clean/aseptic procedure. To protect the patient against harmful germs, including the patient's own, from entering his/her body.
3	AFTER BODY FLUID EXPOSURE RISK	WHEN? WHY?	Clean your hands immediately after an exposure risk to body fluids (and after glove removal). To protect yourself and the health-care environment from harmful patient germs.
4	AFTER TOUCHING A PATIENT	WHEN? WHY?	Clean your hands after touching a patient and her/his immediate surroundings, when leaving the patient's side. To protect yourself and the health-care environment from harmful patient germs.
5	AFTER TOUCHING PATIENT SURROUNDINGS	WHEN?	Clean your hands after touching any object or furniture in the patient's immediate surroundings, when leaving – even if the patient has not been touched. To protect yourself and the health-care environment from harmful patient germs.



How to Handwash?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

Duration of the entire procedure: 40-60 seconds



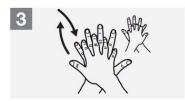
Wet hands with water;



Apply enough soap to cover all hand surfaces;



Rub hands palm to palm;



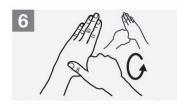
Right palm over left dorsum with interlaced fingers and vice versa;



Palm to palm with fingers interlaced;



Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



Rinse hands with water;



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



Your hands are now safe.



Patient Safety

SAVE LIVES
Clean Your Hands

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WHO acknowledges the Hobitaux Universitaires de Gene've (HUGL), in particular the members of the Infection Control Programme, for their active participation in developing this material.

May 2009

How to Handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

Duration of the entire procedure: 20-30 seconds



Apply a palmful of the product in a cupped hand, covering all surfaces;



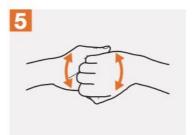
Rub hands palm to palm;



Right palm over left dorsum with interlaced fingers and vice versa;



Palm to palm with fingers interlaced;



Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



Once dry, your hands are safe.



Patient Safety

A World Alliance for Safer Health Care

SAVE LIVES

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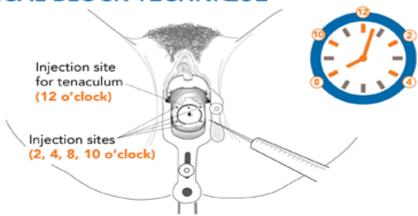
WHVD acknowledges the Höpitaus Universitations de Gereive (FUG), in particular the members of the infection Control Programme, for their active participation in developing this material.

May 2009

Appendix 5: Paracervical block technique: From IPAS guidelines:

www.ipas.org/clinicalupdates.

PARACERVICAL BLOCK TECHNIQUE



- 1 Prepare lidocaine syringe using 20mL of 1% lidocaine and a 3cm (1in) needle.
- Place the speculum and perform cervical antiseptic prep.
- 3 Inject 2mL of lidocaine superficially into the anterior lip of the cervix where the tenaculum will be placed (12 o'clock).
- Grasp cervix with the tenaculum at 12 o'clock.
- Inject remaining lidocaine in equal amounts at the cervicovaginal junction, at 2, 4, 8 and 10
- 6 Begin procedure without delay.

PRACTICE TIPS

- Do not exceed the lidocaine maximum dose of 4.5mg/kg or 200mg total.
- If 1% lidocaine is unavailable, 10mL of 2% may be substituted. A two-point paracervical block technique (injecting at 4 and 8 o'clock) may be used.
- Where available, and where staff have been trained to do so, sodium bicarbonate may be added to the
 paracervical block (1mL of sodium bicarbonate for every 10mL of anesthetic solution).
- Deep injection of lidocaine (3cm or 1in) provides more effective pain relief than superficial injection.
- · Aspirate before injecting to prevent intravascular injection.
- Possible side effects seen with intravascular injection include peri-oral tingling, tinnitus, metallic taste, dizziness or irregular/slow pulse.
- Midlevel providers trained to provide paracervical block demonstrate similar safety and efficacy as physicians.
- Serious adverse events related to paracervical block are rare.

For more information, visit www.ipas.org/clinicalupdates.



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Appendix 6: Medical postabortion care and Abortion regimen chart

RECOMMENDATIONS		COMBINATION (RECORD	MISOPROSTOL-ONLY (ALTERNATE)					
	-	MIFEPRISTONE)) 1	-2 DAYS)) MISOPROSTOL	MISOPROSTOL				
A. INCOMPLETE ABORTION < 13 WEEKS	>	None	Use misoprostol-only regimen	600 µg POb or 400 µg SLb				
IB. INCOMPLETE ABORTION ≥ 13 WEEKS	>	None	Use misoprostol-only regimen	400 µg B, PV or SL every 3 hours ^b				
2. INTRAUTERINE FETAL DEMISE ≥ 14-28 WEEKS	>	200 mg PO once	400 μg PV or SL every 4–6 hours ^b	400 µg SL (preferred) or PV every 4–6 hours ^b				
8A. INDUCED ABORTION < 12 WEEKS	>	200 mg PO once	800 µg B, PV or SL ^b	800 μg B, PV or SL ^b				
BB. INDUCED ABORTION ≥ 12 WEEKS	>	200 mg PO once	400 μg B, PV or SL every 3 hours ^b	400 μg B, PV or SL every 3 hours ^b				
		TIMIN	G OF POST-ABORTION CONTR	ACEPTION				
			IMMEDIATE INITIATION					
A. HORMONAL CONTRACEPTION		Immediately after the first pill of the medical abortion						
SB. IUD	-	With assessment of successful abortion						

Medical abortion: For pregnancies of less than 14 weeks of gestation

If mifepristone is available, it is best practice to use it in combination with misoprostol as it shortens the induction—abortion interval, reduces side effects and decreases the rate of ongoing pregnancy; mifepristone 200 mg should be administered orally 24–48 hours before misoprostol.

Misoprostol 800 micrograms given by the vaginal, buccal or sublingual route, followed by misoprostol 400 micrograms every 3 hours until abortion occurs.

Appendix 7: Post abortion contraception: Source ACOG Best Practice Paper No. 3 March 2016 "Best practice in comprehensive postabortion care" page 12.

NOTE: Vasectomy can be provided to male partners at any time. Bilateral tubal ligation can be provided when the woman is comfortable to undergo the procedure and may be done immediately after MVA.

Appendix: Post-abortion contraception

(Adapted from World Health Organization (2014) Clinical Practice Handbook for Safe Abortion)

Generally, almost all methods of contraception can be initiated immediately following a surgical or medical abortion. Immediate start of contraception after surgical abortion refers to the same day as the procedure, and for medical abortion refers to the day the first pill of a medical abortion regimen is taken. As with the initiation of any method of contraception, the woman's medical eligibility for a method should be verified.

Post-abortion medical eligibility recommendations for hormonal contraceptives, intrauterine devices and barrier contraceptive methods

POST-ABORTION CONDITION	FIRST TRIMESTER	SECOND TRIMESTER	IMMEDIATE POST-SEPTIC ABORTION
coc	1	1	1
CIC	1	1	1
Patch & vaginal ring	1	1	1
POP	1	1	1
DMPA, NET-EN	1	1	1
LNG/ENG implants	1	1	1
Copper-bearing IUD	1	2	4
LNG-releasing IUD	1	2	4
Condom	1	1	1
Spermicide	1	1	1
Diaphragm	1	1	1

CIC, combined injectable contraceptive; COC, combined oral contraceptive; DMPA/NET-EN, progestogen-only injectables: depot medroxyprogesterone acetate/norethisterone enantate; IUD, intrauterine device; LNG/ENG, progestogen-only implants: levonorgestrel/etonorgestrel; POP, progestogen-only pill.

Definition of categories

- 1: a condition for which there is no restriction for the use of the contraceptive method.
- 2: a condition where the advantages of using the method generally outweigh the theoretical or proven risks.
- 3: a condition where the theoretical or proven risks usually outweigh the advantages of using the method.
- 4: a condition that represents an unacceptable health risk if the contraceptive method is used.

Appendix 8 Analgesia

Analgesia	Drug name	Usual dose and	timing	Duration of effects	Common side effects	Comments
Narcotic	Demerol Pethidine*	25–50 mg IV**	30 minutes before	2 hours	Drowsiness Euphoria light- headedness	Reverse with naloxone* 0.4 mg IV
		50–100 mg IM,	30 minutes before procedure		Weakness Dry mouth	Oral dose of meperidine much less effective than
		100–150 mg orally	give 30–60 minutes before procedure			iv or im
Narcotic	Sublimaze	0.05–0.06 mg IV** 0.05–0.1 mg IM	30 minutes before procedure	30–60		Reverse with naloxone* as above
Narcotic	combination Paracetamol (acetaminophen) with codeine	300 mg paracetamol with 30 mg codeine	orally one hour before procedure	3–6 h	Drowsiness Euphoria light- headedness Weakness Dry mouth	
Non-narcotic (nonsteroidal anti- inflammatory)	(Ibuprofen)*	400–800 mg orally	1 hour before procedure	Up to 5 hours	Possible gastro-intestinal upset	
Dissociative drug/ analgesics	Ketamine*	10–25 mg IV**	immediately prior to procedure	10 to 15 min		Brief analgesia only at this dose

^{*}These items appear on the list of essential drugs in: The use of essential drugs: fourth report of the WHO Expert Committee. Geneva, World Health Organization, 1990.

^{**} All analgesic and anxiolytic drugs given intravenously should be administered slowly and intermittently. Their effects,

while rapid in onset, are not instantaneous, and in combination they are more likely to produce side effects. Repeated titration of small doses is a safe way to administer these potent drugs to obtain their important effects without encouraging problematic side effects. from WHO Incomplete abortion Guidelines 2008